CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	McKee Gravel Pit
Proposed Implementation Date:	September - November 2017
Proponent:	Madison County Commissioners
Location:	Section 36, Township 5S, Range 1W (Common Schools Trust)
County:	Madison

I. TYPE AND PURPOSE OF ACTION

The proponent is requesting a Permit to Test for Aggregate to dig approximately 4 test holes on the tract of State Land listed above. The test holes are being dug for the purpose of using the information in a DEQ Opencut application to amend Opencut Permit #85. Access for equipment to dig test holes would be from Jack Creek Bench road. The road reaches the top of the bench near the southeast corner of Section 36, where equipment could be transported off the road easily.

The existing McKee gravel pit located in the SW¼ of Section 36 is currently permitted for 15.3 acres with DNRC and DEQ. The proponent plans to expand the boundaries of this pit for reclamation purposes. The expansion would allow for an improved reclamation plan and contouring slopes at a 3:1 or less grade.

Please see attached maps for test hole locations, existing gravel pit and access route.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

State of Montana Department of Environmental Quality (DEQ): Opencut Mining Plan of Operation and Application to amend permit #85.
State of Montana Department of Natural Resources and Conservation (DNRC) Surface and Mineral Owner: Mineral Resource Specialist - Heidi Crum, and DNRC Archeologist - Patrick Rennie.
DNRC Surface lessee: Kroenke Land & Livestock LLC

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

State of Montana DEQ – Opencut Mining Permit #85

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The proposed Permit to Test for Aggregate would not be granted. The current grazing lease and non-motorized recreational use would continue.

Action Alternative: The Permit to Test for Aggregate would be granted to Madison County to dig test holes on trust land for the purpose of using that information on the State of Montana DEQ – Opencut Mining Plan of Operation and Application to amend Permit #85.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The proposed project area is located in an alluvial fan deposit with gravelly loam soils. There are no unusual geologic features in the proposed project area. The proposed location of the test holes is on an upland bench. The minimal slope of this location decreases erosion potential. The proponent would only operate in dry or frozen conditions. The proponent would be required to reclaim and reseed all test holes and any areas disturbed by equipment.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

There are no surface water resources in the proposed project area. No groundwater resources are expected to be impacted. The proposed location of the test holes is on an upland bench, which is approximately 240 feet higher in elevation than the nearest water wells. No cumulative effects to water resources are anticipated.

The proponent would fuel off-site and use a mobile fuel truck. All fuel, oil and waste would be kept out of the test hole project area.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Vehicle and equipment traffic may generate some airborne dust. No cumulative effects to air quality are anticipated.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Montane Sagebrush Steppe plant communities in proposed project area will be impacted short term. Vegetation species on site include: bluebunch wheatgrass, needle and thread grass, prairie junegrass, Idaho fescue, fringed sagewort, danthonia, and western wheatgrass. No rare plants or cover types are present.

The proponent would be required to reclaim and reseed all test holes and any areas disturbed by equipment.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

A variety of big game, small mammals, raptors, upland game birds and songbirds use this area and activities from the proposed project could short-term disrupt wildlife movement and patterns.

The area of this project is within hundreds of acres of similar, undeveloped habitat. Wildlife would have many alternative travel routes, cover and foraging sites.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

A search was conducted using the Montana Natural Heritage Program (MNHP) database to identify point observations of species of concern in the section of the proposed activity. Point observations documented Western Toads in the 1960's and 1970's in the south central area of Section 36.

Other species of concern were spot located in adjacent sections which include: Trumpeter Swan (2011), American White Pelican (2009) and Great Blue Heron (2009). The test hole sites are located within the 6,500 meter buffer delineated by US Fish & Wildlife Service for Great Blue Heron nesting area. This project should not impact Great Blue Herons any more than the existing gravel pit near the test hole project site.

This site is not within Greater Sage Grouse general or core habitat.

No long term or cumulative impacts to unique, endangered, fragile or limited environmental resources are anticipated from either of the proposed alternatives.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

A Class III intensity level cultural and paleontological resources inventory was conducted of the area of potential effect (APE) on state land. Despite a detailed examination, no cultural or fossil resources were identified in the APE, and no additional archaeological or paleontological investigative work is recommended. The proposed project will have No Effect to Antiquities as defined under the Montana State Antiquities Act. A formal report of findings has been prepared and is on file with the DNRC and the Montana State Historic Preservation Officer.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposed test hole sites are approximately 2.75 miles east of Ennis, MT near a county maintained landfill. Aesthetics may be impacted short-term as the equipment would be visible from the traffic that

utilizes the Jack Creek Bench county road. The test holes would be filled and reseeded after information is collected from the soil profile.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The proposed project would have an impact on the land, approximately 4 test holes will be dug in Section 36. The proponent will reclaim all test hole sites and any disturbance created by equipment.

The proposed project would not affect water quality or quantity asno water is required for the test holes. Air quality would be temporarily affected due to airborne dust particles resulting from mining activities and vehicles traveling to and from the test hole sites. The short term use of this site will minimize degradation to air quality.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

No other environmental documents were found that pertain to Section 36 in T5S-R1W.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

No human and health safety risks were identified as a result of the proposed project other than the typical occupational hazards that coincide with gravel and mining operations. The proponent would be held liable for all risks to human health and safety.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

The proposed project is not expected to alter current or future industrial, commercial, and agricultural activities and production.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The proposed project would not create, move, or eliminate jobs.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Neither of the proposed alternatives will affect the local and state tax base or revenues.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

Neither of the proposed alternatives will affect demand for government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Neither of the proposed alternatives will affect locally adopted environmental plans or goals.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Neither of the proposed alternatives will affect access to and quality of recreational activities.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Neither of the proposed alternatives will affect density and distribution of population and housing.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

Neither of the proposed alternatives will affect social structures and mores.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Neither of the proposed alternatives will affect cultural uniqueness and diversity of the Dell area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The existing grazing lease on this tract provides approximately $1316.00 in annual revenue from Section 36 that goes to Common Schools. The proponent has provided $25 for a test gravel permit. The proponent also holds the gravel permit for this tract which can generate up to $9,000.00 in annual revenue (depending on demand for gravel) from Section 36 that goes to Common Schools.

EA Checklist Prepared By:	Name: Heidi Crum	Date: 8/29/17
	Title: Mineral Resource Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

After reviewing the Environmental Assessment, I have selected the Action Alternative, to issue a Permit to Test for Aggregate. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area and generate revenue for the common school trust.

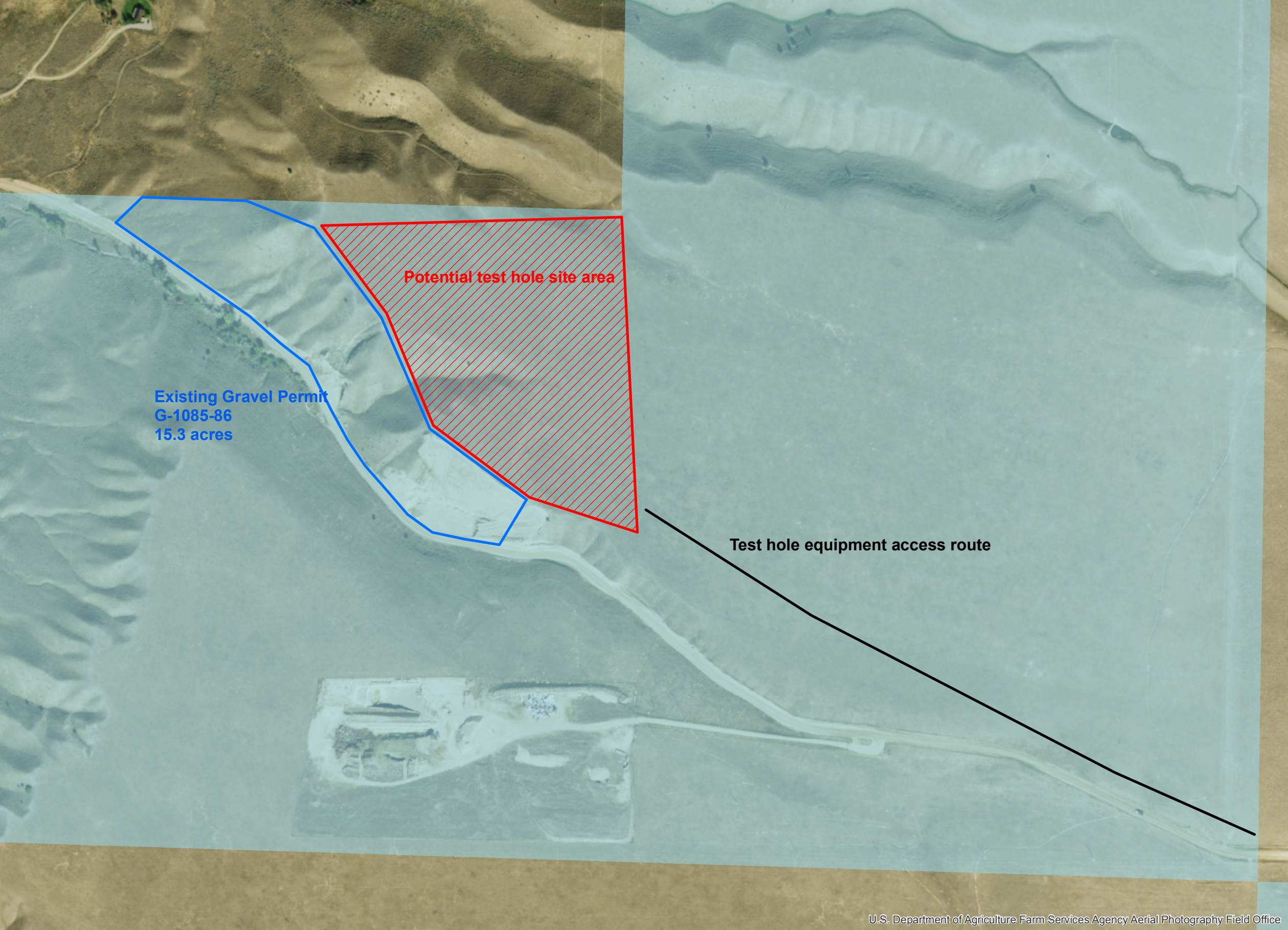
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I conclude all identified potential impacts will be mitigated by utilizing the stipulations listed below and no significant impacts will occur as a result of implementing the selected alternative.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

EA Checklist Approved By:	Name: Trevor Taylor	
	Title: Petroleum Engineer	
Signature: Trevor E Taylor		Date: 8/31/17


Potential test hole site area
Existing Gravel Permit
G-1085-86
15.3 acres
Test hole equipment access route
U.S. Department of Agriculture Farm Services Agency Aerial Photography Field Office